

**Review of Application
for
LIHI Certification of the
Rumford Falls Hydroelectric Project
Androscoggin River, in the Town of Rumford, Oxford County, Maine
Prepared by
Fred Ayer, Executive Director**

Introduction and Overview

The Rumford Falls Project is located on the Androscoggin River, in the Town of Rumford, Oxford County, Maine. The Androscoggin River flows through New Hampshire and Maine for a distance of about 164 miles to Merrymeeting Bay. The Town of Rumford is located on the river in the mountains of western Maine. The river has been heavily developed for nearly two centuries for hydropower production, pulp and paper related activities, and other industrial uses. As a consequence of this industrial development and of municipal waste discharges over the years, the river has been substantially polluted, and its use for recreation significantly impaired. During the past twenty years, however, as a result of construction of improved treatment facilities along the river, there has been an improvement in the river's water quality, and a return to recreational uses, primarily boating and fishing. The Maine Department of Environmental Protection (Environmental Protection) has designated the river in the area of the project as Class C. Class C waters should be suitable for fishing, recreation in and on the water, drinking water supply after treatment, industrial use, and habitat for fish and other aquatic life.

On December 30, 1991, Rumford Falls Power Company ("Company") filed a license application under Part I of the Federal Power Act (FPA) to continue to operate and maintain the Rumford Falls Project. The Company proposed to continue to operate the project in the same manner as it had operated at present; the only modifications to the project would be the addition of two canoe access facilities, one upstream and one downstream of the project.

The FERC issued notice of the application on November 17, 1992. On January 13, 1993, the State of Maine State Planning Office (Maine) filed a timely motion to intervene. On January 15, 1993, the Conservation Law Foundation, American Rivers, Appalachian Mountain Club, and the Maine Audubon Society (Conservation Law) jointly filed a timely motion to intervene, and Trout Unlimited, Maine Council of Trout Unlimited, Atlantic Salmon Federation, and the Maine Council of Atlantic Salmon Federation (Trout Unlimited) jointly filed a timely motion to intervene in opposition to licensing of the project. FERC determined that the license, with measures to protect and enhance the environment, should be issued.

Project Description

The existing project consists of two discrete hydropower developments, the upper station and the lower station, which are served by an upper dam and a middle dam, respectively. The upper station has been in operation since early in this century, and was completed as it now exists in 1918. The lower station was completed by 1955. The two stations have an installed nameplate capacity of 26.55 and 12.8 megawatts (MW), respectively, totaling 39.35 MW.

The project is operated in a run-of-river mode. In 1909 operators of upstream developments and the Company signed an agreement which provides for minimum flows of 1,550 cfs to be maintained below the upstream projects. River flows at the project consequently are relatively consistent. The upper and lower bypass reaches of the two developments are approximately 650 and 2,865 feet, respectively. Leakage from the dams provides base flows in the bypass reaches.

Public comment. LIHI did not receive public comments on the project.

General conclusions. The project's design, location, topography, and geology along with operational adjustments have resulted in a project that appears to be consistent with LIHI criteria.

Recommendation. Based on my review of information submitted by the applicant, my review of additional documentation, and my consultations with resource agency staff, I believe the Rumford Falls Hydroelectric Project meets all of the criteria to be certified and I recommend certification, but suggest one additional condition.

The issue regarding unscheduled outages and the loss of power to gates that control flow which means that under these circumstances an outage, where the turbine shuts down, the project does not meet minimum flow requirements. In 2008, Brookfield had planned to add devices that mitigate for the unscheduled outages and loss of flow. Mainly they were going to install a rubber crest gate and secure alternative power. While the agency staff I spoke with were generally comfortable with Brookfield's solution not all were aware that the installation of the crest gate was complete or that it solved the problem. It was not completed in 2008 because of high water conditions during the construction season. Brookfield now plans to construct/install the crest gate starting in July and complete the work by the end of 2009. Based on that information, I recommend the Board certify the project and as a condition require Brookfield to complete the modifications by December 31, 2009 notify LIHI on completion. In addition, they should notify LIHI of unscheduled outages that occur and impact minimum flow. I believe the Applicant is required to report any future incidents to FERC and it would seem simplest if we requested as a condition of LIHI certification that they copy us when they file with FERC.

LIHI HYDROPOWER CERTIFICATION CRITERIA Goals, Standards and Applicant's Responses

The Low Impact Hydropower Institute certifies those hydropower facilities that meet its eight criteria:

A. River Flows:

Goal: *The facility (dam and powerhouse) should provide river flows that are healthy for fish, wildlife, and water quality, including seasonal flow fluctuations where appropriate.*

Standard: *For instream flows, a certified facility must comply with recent resource agency recommendations for flows. If there were no qualifying resource agency recommendations, the applicant can meet one of two alternative standards: (1) meet the flow levels required using the Aquatic Base Flow methodology or the "good" habitat flow level under the Montana-Tennant methodology; or (2) present a letter from a resource agency prepared for the application confirming the flows at the facility are adequately protective of fish, wildlife, and water quality.*

A. Flows:

Criteria

- 1) Is the facility in Compliance with Resource Agency Recommendations issued after December 31, 1986 regarding flow conditions for fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking conditions, and seasonal and episodic instream flow variations) for both the reach below the tailrace and all bypassed reaches?**

YES *go to B*

Article 401. The licensee shall operate the Rumford Falls Project in a run-of-river mode for the protection of water quality and aquatic resources in the Androscoggin River. The licensee shall maintain the upper and middle impoundments within 1 foot of full pond elevation (601.24 feet U.S. Geological Survey Datum (USGS) at the upper impoundment and 502.74 feet USGS at the middle impoundment) and shall at all times act to minimize the fluctuations of the reservoir surface elevations, i.e., maintain a discharge from the project so that, at any point in time, flows immediately downstream from the project tailraces approximate the sum of inflows to the project reservoirs, minus withdrawals.

Run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the licensee, or for short periods upon mutual agreement between the licensee and the U.S. Fish and Wildlife Service, the Maine Department of Environmental Protection, and Maine Department of Inland Fisheries and Wildlife. If the flow is so

modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 402. The licensee shall release a minimum flow of one cubic foot per second (cfs) from the Upper Dam and 21 cfs from the Middle Dam of the Rumford Falls Project, as measured at the base of the dams, or inflow, whichever is less, for the protection of aquatic resources and water quality in the two bypass reaches of the Androscoggin River. This flow may be temporarily modified, if required by operating emergencies beyond the control of the licensee, or for short periods upon mutual agreement between the licensee and the U.S. Fish and Wildlife Service, the Maine Department of Environmental Protection, and Maine Department of Inland Fisheries and Wildlife. If the flow is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 403. The licensee shall file with the Commission for approval, within 180 days from the date of issuance of the license, a plan to measure and report project flows, water surface elevations, and operation records to monitor compliance with the run-of-river mode of operation and flow releases to the bypass reaches, as stipulated in Articles 401 and 402, respectively. The plan shall include but not be limited to: (1) an implementation schedule; (2) the location, design, and calibration of gaging equipment, if needed; (3) the method of data collection; and (4) a provision for providing flow data and water surface elevation data to the U.S. Geological Survey, the U.S. Fish and Wildlife Service, the Maine Department of Environmental Protection, and the Maine Department of Inland Fisheries and Wildlife within 30 days from the date of the agency's request for the data.

The licensee shall prepare the plan after consultation with the U.S. Geological Survey, the U.S. Fish and Wildlife Service, the Maine Department of Environmental Protection, and the Maine Department of Inland Fisheries and Wildlife. The licensee shall include with the plan documentation of consultation and copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission. If the results of monitoring indicate that changes in project structures or operations are necessary to ensure maintenance of run-of-river operation or maintenance of minimum flows, the Commission may direct the licensee to modify project structures or operations.

YES *go to B*

PASS

A. Flows – The Facility is in Compliance with Resource Agency Recommendations issued after December 31, 1986 regarding flow conditions for fish and wildlife protection, mitigation and enhancement for both the reach below the tailrace and all bypassed reaches. FACILITY PASSES.

B. Water Quality:

Goal: *Water quality in the river is protected.*

Standard: *The water quality criterion has two parts. First, a facility must demonstrate that it is in compliance with state water quality standards, either through producing a recent (after 1986) Clean Water Act Section 401 certification, or demonstrating compliance with state water quality standards (typically by presenting a letter prepared for the application from the state confirming the facility is meeting water quality standards). Second, a facility must demonstrate that it has not contributed to a state finding that the river has impaired water quality under Clean Water Act Section 303(d) (relating to water quality limited streams).*

1) Is the Facility either:

- a) In compliance with all conditions issued pursuant to a Clean Water Act Section 401 water quality certification issued for the facility after December 31, 1986? Or**
- b) In Compliance with the quantitative water quality standards established by the state that support designated uses pursuant to the federal Clean Water Act in the Facility area and in the downstream reach?**

YES go to B2

Under Section 401(a)(1) of the Clean Water Act, 33 U.S.C. §1341(a)(1), the FERC may not issue a license for a hydroelectric project unless the State certifying agency has either issued water quality certification for the project or waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year. On January 2, 1992, the Company filed with the Department of Environmental Protection (“DEP”) an application for water quality certification for the project. DEP issued the requested certification for the project by an order dated December 17, 1992. The certification concluded, in essence, that continued operation of the project in a run-of- river mode would result in the affected waters being suitable for all Class C designated uses and made such a mode of operation a requirement of certification. This requirement is reflected in Article 401 of the new license.

Article 401. The licensee shall operate the Rumford Falls Project in a run-of-river mode for the protection of water quality and aquatic resources in the Androscoggin River. The licensee shall maintain the upper and middle impoundments within 1 foot of full pond elevation (601.24 feet U.S. Geological Survey Datum (USGS) at the upper impoundment and 502.74 feet USGS at the middle impoundment) and shall at all times act to minimize the fluctuations of the reservoir surface elevations, i.e., maintain a discharge from the project so that, at any point in time, flows immediately downstream from the project tailraces approximate the sum of inflows to the project reservoirs, minus withdrawals. Run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the licensee, or for short periods upon mutual agreement between the licensee and the U.S. Fish and Wildlife Service, the Maine

Department of Environmental Protection, and Maine Department of Inland Fisheries and Wildlife. If the flow is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

The WQC for this project requires that:

- 1) the Rumford Falls Project operate in a run-of-river mode (outflow equals inflow) while maintaining a minimum flow in the river immediately downstream of the tailrace of 1,034 cfs or inflow, whichever is less;
- 2) except for approved maintenance or emergencies beyond the applicant's control, the water levels in the upper impoundment be maintained within 1.0 foot of full pond elevation of 601.24 feet USGS (top of flashboards), and water levels in the middle dam impoundment be maintained within 1.0 foot of full middle pond elevation of 502.74 feet USGS (top of flashboards);
- 3) the applicant submit plans for providing and monitoring the water levels in the upper and middle impoundments; and
- 4) the applicant provide a public carry-in canoe access point below the project with parking for six to twelve vehicles and work jointly with others to seek and support future development of carry-in canoe access.

YES go to B2

2) Is the Facility area or the downstream reach currently identified by the state as not meeting water quality standards (including narrative and numeric criteria and designated uses) pursuant to Section 303(d) of the Clean Water Act?

NO *pass*

I spoke with Dana Murch, Maine DEP and we talked about Gulf Island Pond and the 303(d) issue (Gulf Island Pond is approximately 30 miles downstream of Rumford). The Androscoggin River, while improved since the days it ran yellow with foam from pulp and papermaking activities, is still Maine's most polluted major river. It suffers from annual summertime algae blooms and dioxin contamination. A 14-mile section called Gulf Island Pond, which is the reservoir created by the Deer Rips Dam, never met Class C standards. However after exhaustive study and DEP proceedings and a 2008 DEP order that judged the current conditions will bring this section in compliance and no longer listed in the 303(d) list of impaired waters. The DEP orders that Dana had referenced which were issued February 7, 2008, can be found at the following link:

http://www.maine.gov/dep/blwq/topic/gip/summary_of_%20appeal_proceedings.pdf

One of the Intervenor to the Rumford FERC relicensing, Conservation Law Foundation (CLF), took the position that the Company must take mitigation measures to help restore lost oxygen content in waters downstream of the project and the paper mill, must study the effects of dioxin and other pollutants in project waters and take necessary remedial action, and must provide mitigation to bring the project into compliance with Maine's water quality standards to restore designated and beneficial uses. Both Interior and Environmental Protection agreed with the Company's review of water quality data showing that dissolved oxygen levels consistently meet Class C requirements. FERC agreed and determined that these measures are unnecessary. Further FERC found that the project does not itself create or release pollutants, and that operation of the project in a run-of-river mode would minimize disruption of sediments in the project area.

NO *pass*

PASS

B. Water Quality – The Facility is in Compliance with all conditions issued pursuant to a Clean Water Act §401 in the Facility area and in the downstream standards (including narrative and numeric criteria and designated uses) pursuant to Section 303(d) of the Clean Water Act. FACILITY PASSES

C. Fish Passage and Protection:

Goal: *The facility provides effective fish passage for riverine, anadromous and catadromous fish, and also protects fish from entrainment.*

Standard: *For riverine, anadromous, and catadromous fish, a facility must be in compliance with recent (after 1986) mandatory prescriptions regarding fish passage (such as a Fish and Wildlife Service prescription for a fish ladder) as well as any recent resource agency recommendations regarding fish protection (e.g., a tailrace barrier). If anadromous or catadromous fish historically passed through the facility area but are no longer present, the applicant must show that the fish are not extirpated or extinct in the area because of the facility and that the facility has made a legally binding commitment to provide any future fish passage recommended by a resource agency.*

When no recent fish passage prescription exists for anadromous or catadromous fish, and the fish are still present in the area, the facility must demonstrate either that there was a recent decision that fish passage is not necessary for a valid environmental reason, that existing fish passage survival rates at the facility are greater than 95% over 80% of the run, or provide a letter prepared for the application from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service confirming the existing passage is appropriately protective.

1) Is the facility in compliance with Mandatory Fish Passage Prescriptions for upstream and downstream passage of anadromous and catadromous fish issued by Resource Agencies after December 31, 1986?

YES go to C5

Section 18 of the FPA includes a provision that the Commission shall require the construction of such fishways as the Secretary of the Interior (Interior) may prescribe. By letter dated January 21, 1993, Interior requested that any license issued for the Rumford Falls Project include a reservation of authority for Interior to prescribe the construction, operation, and maintenance of fishways. We recognize that a future need for fishways cannot always be determined at the time of licensing. Article 404 of this license therefore reserves authority to the Commission to require the licensee to construct, operate, and maintain such fishways as may be prescribed by Interior pursuant to Section 18.

Article 404. Authority is reserved to the Commission to require the licensee to construct, operate, and maintain, or provide for the construction, operation, and maintenance of, such fishways as may be prescribed by the Secretary of the Interior pursuant to Section 18 of the Federal Power Act.

YES go to C5

5) Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream or downstream passage of riverine fish?

NOT APPLICABLE *go to C6*

6) Is the facility in Compliance with Resource Agency Recommendations for Riverine, anadromous and catadromous fish entrainment protection, such as tailrace barriers?

NOT APPLICABLE *Pass go to D*

PASS

C. Fish Passage and Protection – The facility is in Compliance with Mandatory Fish Passage Prescriptions for upstream and downstream passage of anadromous and catadromous fish issued by Resource Agencies after December 31, 1986 - FACILITY PASSES.

D. Watershed Protection:

Goal: *Sufficient action has been taken to protect, mitigate and enhance environmental conditions in the watershed.*

Standard: *A certified facility must be in compliance with resource agency recommendations and FERC license terms regarding watershed protection, mitigation or enhancement. These may cover issues such as shoreline buffer zones, wildlife habitat protection, wetlands protection, erosion control, etc. The Watershed Protection Criterion was substantially revised in 2004. The revised criterion is designed to reward projects with an extra three years of certification that have: a buffer zone extending 200 feet from the high water mark; or, an approved watershed enhancement fund that could achieve within the project's watershed the ecological and recreational equivalent of land protection in D.1. and has the agreement of appropriate stakeholders and state and federal resource agencies. A Facility can pass this criterion, but not receive extra years of certification, if it is in compliance with both state and federal resource agencies recommendations in a license approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the project.*

1) Is there a buffer zone dedicated for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low-impact recreation) extending 200 feet from the high water mark in an average water year around 50 - 100% of the impoundment, and for all of the undeveloped shoreline

NO go to D2

2) Has the facility owner/operator established an approved watershed enhancement fund that: 1) could achieve within the project's watershed the ecological and recreational equivalent of land protection in D.1.,and 2) has the agreement of appropriate stakeholders and state and federal resource agencies?

NO go to D3

3) Has the facility owner/operator established through a settlement agreement with appropriate stakeholders and that has state and federal resource agencies agreement an appropriate shoreland buffer or equivalent watershed land protection plan for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low impact recreation)

NO Go to D4

4) Is the facility in compliance with both state and federal resource agencies recommendations in a license approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the project.

YES *Pass, go to E*

Land in the general vicinity of the project facilities is considered urban, and use is primarily industrial and commercial. Along the upper dam impoundment the land is rural, and primarily used for agriculture.

CLF, one of the intervenors, wanted the Applicant to investigate the feasibility of obtaining a buffer zone around the entire project area to provide permanent public access and to protect undeveloped lands. FERC found that the Applicant maintains a buffer zone, accessible to the public, for about one mile along both shorelines above the Upper Dam impoundment. The buffer zone is 10 to 800 feet wide, and is accessible to the public from either U.S. Route 2 or Maine Route 120. Most of the remaining land adjacent to the shoreline and within the project boundary is owned by private individuals and the Town of Rumford. In addition, the FERC license order requires, the Applicant to develop two additional canoe access facilities, upstream and downstream, respectively, of the project.

YES *Pass, go to E*

PASS

**D. Watershed Protection – The facility is in compliance with both state and federal resource agencies recommendations in a license approved shore land management plan regarding Protection, mitigation, and enhancement of shore lands surrounding the Project
- FACILITY PASSES**

E. Threatened and Endangered Species Protection:

Goal: *The facility does not negatively impact state or federal threatened or endangered species.*

Standard: *For threatened and endangered species present in the facility area, the facility owner/operator must either demonstrate that the facility does not negatively affect the species, or demonstrate compliance with the species recovery plan and any requirements for authority to “take” (damage) the species under federal or state laws.*

Threatened and Endangered Species Protection:

1) Are threatened or endangered species listed under state or federal Endangered Species Acts present in the Facility area and/or downstream reach?

YES *Go to E2*

Section 7(a) of the Endangered Species Act of 1973 (ESA) requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of the critical habitat of such species. The project is within the range of the bald eagle (*Haliaeetus leucocephalus*) and the peregrine falcon (*Falco peregrinus anatum*), which were both Federally listed as endangered at the time FERC’s Environmental Assessment for Rumford was prepared. The FWS states that, no Federally listed or proposed threatened and endangered species under the jurisdiction of FWS are known to occur in the project area, with the exception of occasional, transient, endangered bald eagles and peregrine falcons and further consultation with FWS under Section 7 of the Endangered Species Act was not required based on a letter from Gordon E. Beckett, Field Supervisor, New England Field Office, U.S. Fish and Wildlife Service, Concord, New Hampshire, June 16, 1992. Based on the FWS’s input, FERC concluded that continued project operation is not likely to adversely affect any Federally listed or proposed threatened and endangered species.

YES *Go to E2*

2) If a recovery plan has been adopted for the threatened or endangered species pursuant to Section 4(f) of the Endangered Species Act or similar state provision, is the Facility in Compliance with all recommendations in the plan relevant to the Facility?

YES *Go to E3*

3) If the Facility has received authority to Incidentally Take a listed species through: (i) Having a relevant agency complete consultation pursuant to ESA Section 7 resulting in a biological opinion, a habitat recovery plan, and/or (if needed) an incidental take

statement; (ii) Obtaining an incidental take permit pursuant to ESA Section 10; or (iii) For species listed by a state and not by the federal government, obtaining authority pursuant to similar state procedures; is the Facility in Compliance with conditions pursuant to that authority?

NOT APPLICABLE Go to E5

5) If E2 and E3 are not applicable, has the Applicant demonstrated that the Facility and Facility operations do not negatively affect listed species?

YES *Pass, go to F*

The FWS states that, no Federally listed or proposed threatened and endangered species under the jurisdiction of FWS are known to occur in the project area, with the exception of occasional, transient, endangered bald eagles and peregrine falcons and further consultation with FWS under Section 7 of the Endangered Species Act is not required (letter from Gordon E. Beckett, Field Supervisor, New England Field Office, U.S. Fish and Wildlife Service, Concord, New Hampshire, June 16, 1992).

PASS

E. Threatened and Endangered Species Protection – Except for the occasional transient no threatened or endangered species or their critical habitat listed under state or federal Endangered Species Acts are present in the Facility area. FACILITY PASSES.

F. Cultural Resource Protection:

Goal: *The facility does not inappropriately impact cultural resources.*

Standard: *Cultural resources must be protected either through compliance with FERC license provisions, or, if the project is not FERC regulated, through development of a plan approved by the relevant state, federal, or tribal agency.*

Criteria:

- 1) If FERC-regulated, is the Facility in compliance with all requirements regarding Cultural Resource protection, mitigation or enhancement included in the FERC license or exemption?**

YES *Pass, go to G*

In the summer of 1988, the Applicant conducted an archeological study of the upper dam impoundment shoreline. The study was designed to identify archeological sites meriting a determination of eligibility for listing on the National Register of Historic Places. This was followed by a 1989 study designed to determine eligibility. These studies revealed that there are eight prehistoric sites that are eligible (i.e., they are "historic properties")

The Maine Historic Preservation Commission (MHPC) recommended a formal evaluation of the project facilities to determine their eligibility. The Applicant proposed an archaeological mitigation plan for six of the eight eligible sites. Due to landowner opposition, the plan contained no provision for mitigating effects at two of the sites.

The FERC and the MHPC executed a Programmatic Agreement (Agreement) stipulating an eligibility evaluation for the project facilities, contingency measures for handling historic properties discovered during the license term, and implementation of the archeological mitigation plan.

The only land-disturbing activity proposed was the development of the downstream canoe access point at the Carlton Bridge site. In a July 17, 1992 letter the MHPC determine that no properties at the proposed canoe access site are of any historic, architectural, or archaeological significance.

Relicensing the Rumford Falls Project affords protection to six of the eligible archaeological sites near the upper dam impoundment and to any historical properties in the project boundaries later determined eligible. There is still the possibility that undiscovered properties exist in the project area, and project development or operation could affect such properties. In addition to this possibility, any project-related

construction or ground-disturbance undertaken in the future, that the Applicant has not already considered, could affect historic properties in currently unforeseen ways. In both instances, the Agreement mandates that the Applicant consult further with the MHPC to protect historic properties.

YES *Pass, go to G*

PASS

G. Cultural Resources – The Facility is in Compliance with all requirements regarding Cultural Resource protection, mitigation or enhancement included in the FERC license - FACILITY PASSES.

H. Recreation:

Goal: *The facility provides free access to the water and accommodates recreational activities on the public's river.*

Standard: *A certified facility must be in compliance with terms of its FERC license or exemption related to recreational access, accommodation and facilities. If not FERC-regulated, a facility must be in compliance with similar requirements as recommended by resource agencies. A certified facility must also provide the public access to water without fee or charge.*

Criteria:

1) If FERC-regulated, is the Facility in Compliance with the recreational access, accommodation (including recreational flow releases) and facilities conditions in its FERC license or exemption?

YES *Go to G3*

To enhance the recreational opportunities, the Applicant agreed to develop canoe access facilities above and below the project (Articles 407 and 408).

Boating and fishing are the primary recreational activities at the project site. A recreational use study conducted by the Applicant in 1992 revealed that recreational use in the project area is limited and comprised of local residents.

Most of the recreational use occurs on the upper dam impoundment. The existing public recreational facilities along this impoundment include the Logan Brook access, an unimproved boat launch located along the south shore off South Rumford Road; and a trailered boat launch located along the north shore off U.S. Route 2.

In 1991, the Applicant helped develop a canoe access facility in Gilead, Maine, 25 miles upstream of the project boundary. The boat launch at the upper dam impoundment provides a termination point for canoe trips along this segment of the river.

Fishing access to the middle dam impoundment is provided near the Rumford information booth. Boating is uncommon on this impoundment because of its size. Access to the tailrace areas and bypassed reaches is limited to shoreline fishing along the western shoreline at the lower station tailrace.

Article 407. The licensee shall implement the canoe access facility plan filed September 22, 1992. The licensee shall construct the carry-in canoe access facility downstream of the existing project boundary at the Carlton Bridge site. The facility shall include a parking area, a canoe launching area, and access for the disabled. The licensee shall operate and maintain or arrange

for the operation and maintenance of the canoe access facility during the term of the license. Within 90 days of completion of construction, the licensee shall file revised exhibits to show the facility as built and to include the facility within the project boundary.

Article 408. The licensee, after consulting with the Town of Rumford, the Maine Department of Conservation, and the Friends of the Androscoggin, and within six months from the issuance date of the license, shall file for Commission approval, and upon approval implement, a plan for a canoe access facility at Rumford Point, Maine. The canoe access facility plan shall include:

- (a) a parking area, a canoe launching area, and access for the disabled;
- (b) a detailed drawing showing the type and location of the recreation facilities;
- (c) a cost estimate and a schedule for completing the facility within two years of the issuance date of the license;
- (d) a description of how the recreation facilities shall be operated and maintained during the term of the license and the entity responsible for the operation and maintenance of such facilities.

YES *Go to G3*

3) Does the Facility allow access to the reservoir and downstream reaches without fees or charges?

YES *Pass, go to H*

PASS

G. Recreation – The Facility is in Compliance with all requirements regarding Recreation protection, mitigation or enhancement included in the FERC license and allow access to the reservoir and downstream reaches without fees or charges - FACILITY PASSES.

Facilities Recommended for Removal:

Goal: *To avoid encouraging the retention of facilities that have been considered for removal due to their environmental impacts.*

Standard: *If a resource agency has recommended removal of a dam associated with the facility, certification is not allowed.*

1) Is there a Resource Agency recommendation for removal of the dam associated with the Facility?

NO *Pass, Facility is Low Impact*

**PASS
FACILITY IS LOW IMPACT**

RECORD OF CONTACTS WITH RESOURCE AGENCY STAFF

Date of Conversation: March 26, 2009
Application Reviewer: Fred Ayer, Executive Director
Person Contacted: Dana Murch, DEP

Telephone: 207-287-7784

I spoke with Dana today to clarify a few items about the Project. From his perspective the Applicant has been good on compliance. There was an issue regarding unscheduled outages and the loss of power to gates that control flow, meaning that under these circumstance, outage where the turbine shuts down, flow does not meet minimum flow standards. Brookfield has added devices that mitigate for the unscheduled outages and loss of flow. Mainly they plan or have installed a rubber crest gate and secured alternative power. (see updated discussion in Recommendations page 2).

In a follow-up phone call we talked about Gulf Island Pond and the 303(d) issue. The Androscoggin River, while improved since the days it ran yellow with foam from pulp and papermaking activities, is still Maine's most polluted major river. It suffers from annual summertime algae blooms and dioxin contamination. A 14-mile section called Gulf Island Pond, which is the reservoir created by the Deer Rips Dam, never met Class C standards. However after exhaustive study a recent DEP proceeding and a 2008 DEP order has judged the current conditions will bring this section in compliance and no longer listed in the 303(d) list of impaired waters. The DEP orders that Dana had referenced which were issued February 7, 2008, can be found at the following link:

http://www.maine.gov/dep/blwq/topic/gip/summary_of_%20appeal_proceedings.pdf

Date of Conversation: April 9, 2009
Application Reviewer: Fred Ayer, Executive Director
Person Contacted: Rick Kent, Town of Rumford

Telephone: 207-364-7993

My conversation with Rick was very brief. He had no complaints and he mentioned that he had not been up to the site and wasn't sure whether the Applicant had installed the rubber dam. He

made it a point to say that Brookfield was incredibly responsive and it was not uncommon for them to stop in to his office and make sure they were up to date with permits. He felt they were an excellent company to work with.

Date of Conversation: March 31, 2009
Application Reviewer: Fred Ayer, Executive Director
Person Contacted: Fred Seavey, US Fish & Wildlife Service

Telephone: 207-827-5938

I spoke briefly with Fred, he wanted to take some time to look over his files and said he would get back to me by Friday. Fred apparently got very busy and didn't get back to me so I started the recall process on April 9th and left a message @10am.

Fred got back to me on Friday morning April 10, 2009 and we had a nice conversation about the Rumford Project. Fred said that generally he was pleased and impressed with Brookfield's operation of the Project. He has found them to be good to work with and responsive. The one issue that Fred wanted to discuss was what he referred to as a "chronic problem" with unscheduled outages which caused the minimum flow to not be met during these incidents. He knew that Brookfield had developed a plan to mitigate the unscheduled outages and reduced minimum flow, i.e., Obermeyer rubber bladder crest gate and alternative power sources. While he was comfortable that the proposed solution would solve the problem, he wasn't aware that the installation of the crest gate was complete. We discussed this further and I agreed to pursue this with the Applicant and send Fred an email. I also suggested that I would recommend to the Board that we require Brookfield to notify LIHI of unscheduled outages. Fred suggested that the Applicant is required to report of these future incidents to FERC and it would seem simplest if we requested as a condition of LIHI certification that they copy us.

Fred went on to point out Brookfield's willingness to work with agency requests. He had been concerned that the unscheduled outages could negatively impact wetlands. He asked Brookfield about this and they hired a wetlands contractor who did a study of the area of concern and Fred was impressed with their approach and attitude.

Date of Conversation: March 31, 2009
Application Reviewer: Fred Ayer, Executive Director
Person Contacted: Steve Timpano
Maine Dept. of Inland Fisheries and Wildlife (IF&W)

Telephone: 207-287-5258

I had a nice conversation with Steve and it was clear that his agency was very satisfied with license conditions for the Rumford Project. He specifically mentioned the rubber dam and resolution of flows and impoundment levels. He said I should check with Dana, but he believed that there had been a resolution to all issues raised by the parties. He has had the opportunity to work with Brookfield and has found it to be a positive experience. He pointed out that he has dealt with the “old Great Northern crowd” (now Brookfield employees) and they had recently completed a settlement agreement on the operation of the storage lakes and ponds, some FERC licensed and some not. He said he felt that Brookfield was very receptive to working with NGOs and agencies.

Date of Conversation: April 16, 2009
Application Reviewer: Fred Ayer, Executive Director
Person Contacted: Sean Faulds, Brookfield Renewable Power

Telephone: (819) 561-2722 ext 6718

I called Sean earlier in the week to confirm the status of the installation of the crest gate that would replace wooden flashboards. He told me he would check with the engineers on site. He called back on the 16th and told me that the gate had not been installed because of unusually high flows. Brookfield engineers plan to start the project in July and complete the work by December 31, 2009. I told him that based on that information I would recommend that the Board add a condition (described under recommendations page 2) regarding unscheduled outages and completion of construction. Sean said he thought that was very reasonable.